

Amendments to the Specification:

Please replace the paragraphs beginning at page 12, line 29 with the following rewritten paragraphs:

In an embodiment, the present invention provides an ~~apparatus~~apparatus 70 for controlling the blood loss from a patient due to venous needle dislodgement shown in Fig. 4. The apparatus can include a needle dislodgement device as previously discussed and shown in Figs. 1 and 4.

In an embodiment, the ~~apparatus~~apparatus 70 includes a controller 72 (not shown) that is in electrical contact with the ~~sens~~sensor 10. The controller 72 can be attached to the patient via an attachment 73 in any suitable way. The controller ~~can~~72 can be configured in a variety of different ways depending on the application thereof. Upon detection of the presence of blood due to needle dislodgement, the ~~sensor~~sensor 10 produces a signal indicative of the degree of wetness due to blood. This signal can then be transmitted to the controller ~~which~~72 which is electrically connected to the sensor 10 via a connection 74 in any suitable way.

The controller ~~can~~72 can process the signal in a variety of different ways such that the blood loss from the patient is minimized. In an embodiment, the controller ~~is~~72 is in communication with a hemodialysis machine 76 via a communication connection 78(not shown). This communication connection 78 can be either hard wired (i.e., electrical communication cable), a wireless communication (i.e., wireless RF interface), a pneumatic interface or the like. In this regard, the controller ~~can~~72 can process the signal to communicate with the hemodialysis machine to shut off or stop the blood pump as indicated in box 80—associated with the hemodialysis ~~machine~~machine 76 and thus effectively minimize the amount of blood loss from the patient due to needle dislodgement during hemodialysis.

The controller ~~can~~72 can communicate with the hemodialysis machine in a variety of other ways. For example, the controller ~~and~~72 and hemodialysis machine can communicate to activate a venous line clamp as shown in box 82(not shown) for preventing further blood flow via the venous needle thus minimizing blood loss to the patient. In an embodiment, the venous line clamp is activated by the controller and attached to or positioned in proximity to the sensor and sensor holder such that it can clamp off the venous line in close proximity to the needle. Once clamped, the hemodialysis machine is capable of sensing an increase in pressure and can

be programmed to shut-off the blood pump upon sensing pressure within the blood flow line which is above a predetermined level. In this regard, the sensor, sensor holder and venous line clamp can act together as a stand-alone control unit. Alternatively, the venous line clamp can be controllably attached to the hemodialysis machine.

Please replace the paragraph beginning at page 14, line 11 with the following rewritten paragraph:

In addition, the controller can be utilized to monitor and/or control one or more treatment parameters during hemodialysis. These parameters can include, for example, the detection of blood due to blood loss upon needle dislodgement, the change in blood flow, the detection of air bubbles in the arterial line, detection of movement of the sensor during treatment, detection and/or monitoring of electrical continuity of the sensor or other like treatment parameters. In an embodiment, the controller includes a display 84(not shown) for monitoring one or more of the parameters as shown in Fig. 4.